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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------|------------------|
| 09/717,332   | 11/20/2000  | John R. Josephson    | OSU1159-074D               | 5020             |
| 8698   | 7590        | 10/21/2005           |                            |                  |
| STANDLEY LAW GROUP LLP<br>495 METRO PLACE SOUTH<br>SUITE 210<br>DUBLIN, OH 43017 |             |                      | EXAMINER<br>HIRL, JOSEPH P |                  |
|  |             |                      | ART UNIT<br>2129           | PAPER NUMBER     |

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/717,332 | <b>Applicant(s)</b><br>JOSEPHSON ET AL. |  |
|                              | <b>Examiner</b><br>Joseph P. Hirl    | <b>Art Unit</b><br>2129                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 92-121 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 92-121 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to an AMENDMENT entered July 22, 2005 for the patent application 09/717,332 filed on November 20, 2000.
2. All prior office actions are fully incorporated into Office Action by reference.

### ***Status of Claims***

3. Claims 92-121 are pending.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 92-121 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5-25, 29-38 of U.S. Patent No. 6,771,293. Although the conflicting claims are not identical, they are not patentably distinct from each other because the species anticipates the genus. U.S. Patent 6,771,293 addresses specifically decision-making in design space while the applicant addresses generally decision-making.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 92-101 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject

matter under 35 U.S.C. 101. A computer program per se is non statutory. This rejection will be withdrawn if the term computerized is appropriately inserted in the preamble of claim 92.

7. Claims 92-121 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. The Examiner has the obligation to interpret the claims in the broadest reasonable manner and does so in the following manner:

Given a set of decision alternatives  $D_1, D_2, \dots, D_n$  each of which has two performance attributes (such as  $A_{D1}$  and  $B_{D1}$  related to  $D_1$ ). For the sake of simplicity, the given set of decision alternatives are divided into two sections, approximately equal in size. To each of the two sections, the disclosed exclusion process identified in independent claims 92, 102 and 112 are applied with the net result that one dominant decision alternative emerges from each of the two sections ( $D_{s1}, D_{s2}$ ). Each of these decision alternatives has two performance attributes,  $A_{DS1}$  and  $B_{DS1}$  related to  $D_{s1}$  and  $A_{DS2}$  and  $B_{DS2}$  related to  $D_{s2}$ . Further, the performance attributes of one section are a mirror image to those of the other section ... one attribute inferior to the other and one attribute superior to the other... or related to each decision alternative, one of the two performance attributes is inferior for each. From the claims 92, 102 and 112, it is interpreted that decisions (exclusions) are made on the basis of inferior performance criteria and consequently neither  $D_{s1}$ , or  $D_{s2}$  survive ... inferior performance dominates or has greater weight. Hence, the disclosed methodology yields a null and has no utility.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 92-121 are rejected under 35 USC 112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the undisclosed practical application. This is how the MPEP puts it:

("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."; In re Kirk, '376 F.2d 936, 942, 153 USIPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention.**"). See, MPEP 21107.01 (IV), quoting In re Kirk (emphasis added).

Therefore, claims 92-121 are rejected on this basis.

9. Claims 92-121 were not further evaluated since they will have to be rewritten to overcome the above rejections and at this time, it could not be determined how such claims will be rewritten.

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***Response to Arguments***

10. Applicant's arguments filed on July 22, 2005 related to Claims 92-121 have been fully considered but are not persuasive.

In reference to Applicant's argument:

Previously, the claims of the application have been rejected under 35 U.S.C. § 102(b) as being anticipated by Amado. Amado teaches an executive information system for analyzing and interpreting large volumes of data to assist an executive with the management of a business such as a fast-food branch, gas station, smaller rural institution, etc. It uses data such as sales data, profit data, etc. from many different sources to generate a diagnostics database. Various formulas are applied to the sales, profit, etc. data in order to generate the diagnostics which are tied to the original data. The diagnostics relate to the data analysis performed by the system and include such advisories or warnings as "the companies debt is too large" (Col. 32,11. 22-26), "the customer service department is falling behind" (Col. 33, 11. 22-25), and there is a simultaneous downturn in sales and profits for five products (Col. 43,11. 40-45). A user is permitted to query the diagnostics and then act upon them. The system learns based on a user's input and interaction with the system and apparent priorities so that the generated diagnostics are meaningful to the user. Although the system provides diagnostics that may be helpful to an executive in determining a course of action for the company, the system does not provide an executive with a set of decision alternatives to consider and does not assist the executive in selecting one of the decision alternatives by filtering the decision alternatives according to two or more performance criteria to exclude inferior decision alternatives and presenting the remaining decision alternatives, which are trade-offs with respect to each other, in scatterplots for further consideration.

Examiner's response:

Para 13. applies. Limitations appearing in the specification but not recited in the claim are not read into the claim. From Amado @ c 15:25-33:

The primary issues addressed by rough sets are the discovery, representation, and analysis of data regularities. In the rough sets approach, knowledge is defined as the ability to classify objects belonging to the domain of interest into two or more categories. Such a classification process generally involves two steps: query (for example, reading the values of attributes of the objects) and decision (for example, classifying objects into categories based on the information expressed in the attributes).

Amado's decision involves multiple objects (alternatives), each of which has a plurality of attributes where filtering is related to the domain of interest. The classification or clustering represents a scatterplot

In reference to Applicant's argument:

Claims 92-101 are based on claims 15-25 of U.S. Patent 6,771,293. Claim 92 is based on claim 15 and has been extended to cover decision alternatives rather than simply design candidates. Decision alternatives are filtered according to a plurality of dominance criteria to produce a subset of decision alternatives that excludes inferior alternatives. The production of a set of filtered alternatives by comparing alternatives to each other and excluding inferior alternatives based on two or more dominance criteria is believed to patentably define the present invention when combined with the presentation of the filtered alternatives in a scatterplot according to the dominance criteria used. The only alternatives that remain in the filtered set are those that represent "trade-offs" such that none of the remaining alternatives are superior to the other alternatives in every respect. The presentation of these alternatives in a display then shows the "trade-offs" to the user.

**Examiner's response:**

Para 13. applies. The above reference to obvious double patenting applies.

The above reference to 35 USC 101 applies. Scatterplots are merely a clustering or classifying concept. Following the discussion related to 35 USC 101, nothing will appear on the display.

**In reference to Applicant's argument:**

Claims 102-121 also indicate clearly that the present invention filters a set of decision alternatives according to multiple performance criteria to produce a subset of decision alternatives that are trade-offs with respect to each other. The viewer of the present invention may be used to view the filtered decision alternatives that remain in the subset so that a user can explore the trade-offs.

**Examiner's response:**

Para 13. applies. Amado @ c 15:25-33 applies. Following the discussion related to 35 USC 101, nothing will appear on the display.

***Examination Considerations***

11. The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023,



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1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

12. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

13. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

14. Examiner's Opinion: paras 11-13 apply.

***Conclusion***

15. Claims 92-121 are rejected.

***Correspondence Information***

16. Any inquiry concerning this information or related to the subject disclosure should be directed to the Primary Examiner, Joseph P. Hirl, whose telephone number is (571) 272-3685. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David R. Vincent can be reached at (571) 272-3080.

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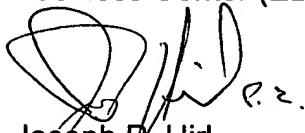
(located on the first floor of the south side of the Randolph Building);

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



Joseph P. Hirl  
Primary Examiner  
October 19, 2005